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EXAMINER

KIM, JUNG W

ART UNIT

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2132

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/801,339	Applicant(s) ODA, AKIHIKO	
	Examiner JUNG KIM	Art Unit 2132	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 25 January 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This Office action is in response to the amendment filed on 1/25/08.
2. Claims 7-20 are pending.

Drawings

3. Per applicant's request (Remarks, pg. 12), the drawings submitted on 3/15/04 have been accepted. Generally, when the Office does not object to submitted, original drawings, the acceptance of originally filed drawings is implied.

Response to Amendment

4. The 112 rejection to claim 14 is withdrawn as the amendment overcomes the 112 rejection.

Response to Arguments

5. Applicant's arguments with respect to the prior art rejections have been considered, but are not persuasive.
6. Applicant argues that Candelore does not disclose the limitation "combining the encryption key data and the encrypted data, both of which have been generated from the same compressed data." See Remarks, pg. 15. It is initially noted that applicant's use of the term "encryption key data" is not aligned with the typical use of the term as known to one of ordinary skill in the art. Encryption key data is conventionally identified

in the art as data that is combined with unencrypted data to create encrypted data. For example, key data used in substitution and transposition techniques constitute a large swath of encryption key data. Applicant's use of the term differs in that the claims appear to define encryption key data as a portion of the compressed data that corresponds to the portion of the data that is encrypted; the claimed encrypting steps do not define combining the encryption key data with the certain portion of the compressed data, but rather, it merely recites encrypting the portion of the compressed data. The claims further define that the encryption key data is then utilized in the decryption process by "combining" it with the encrypted data to generate the compressed data. See figure 1 and claim 7. In view of the broad scope of the claimed invention, it is respectfully submitted that Candelore suggests this limitation in the claims. In Candelore, MPEG data streams are selectively encrypted based on a PID of a packet using a PID filtering process. The PIDs are read from the packet header of the MPEG data. The decryption process requires the use of the PID corresponding to the selectively encrypted packets. See Candelore, fig. 1 and related text. Hence, in this particular case, the PID corresponds to the claimed limitation of "encryption key data" and the corresponding encrypted packet based on the PID suggests the limitation of "encrypted data"; moreover, both the PID and encrypted packet are generated from the same compressed data.

7. In addition, Candelore discloses providing management information within the PSI, which identifies these selected PIDs, (col. 4, lines 40-59) wherein the PSI is appended to the encoded data flow to be decoded by a separate party (7:34-36).

Hence, contrary to applicant's arguments, Candelore also discloses the limitations of claims 8, 13 and 20.

8. For these reasons, the claims remain rejected under the prior art of record.

Claim Rejections - 35 USC § 102

9. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

10. Claims 7-19 are rejected under 35 U.S.C. 102(e) as being anticipated by Candelore et al. USPN 7,155,012 (hereinafter Candelore).

11. As per claim 7, Candelore discloses a data decoding device comprising:

- a. encryption key extracting means for extracting a portion of compressed data, acquired by compressing data by a compression processing, as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30) and
- b. compressed data decoding means for decoding the encrypted data back to the compressed data by combining the encryption key data and the encrypted

data, both of which have been generated from the same compressed data. (12:3-27)

12. As per claims 8-12, Candelore discloses an image data storing device comprising:

- c. compression means for compressing image data by a compression processing; (col. 3:49-51)
- d. encryption key extracting means for extracting a portion of the compressed data as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30)
- e. encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; (7:29-36)
- f. management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data; (7:29-36; 9:15-52)
- g. compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data

storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted encrypted data back to the compressed data; (12:3-27) and

h. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the image data; (12:22-23)

i. wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; (12:40-42)

j. wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; (the original portion is removed)

k. wherein the encryption means adds other data to the portion, extracted as the encryption key data, of the compressed data; (the replaced portion is the original data scrambled with a scrambling key)

l. wherein a predetermined range from a beginning of the compressed data is made the encryption key data. (9:35-45; 10:56-62)

13. As per claims 13-19, Candelore discloses an image data storing device comprising:

m. compression means for compressing image data by a compression processing; encryption key extracting means for extracting a portion of the compressed data, as encryption key data; encryption means for encrypting the

compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30)

n. encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; (7:29-36) and

o. decoding information outputting means for outputting the encryption key data extracted by the encryption key extracting means and specific information which identifies the encrypted data corresponding to the encryption key data in a predetermined form to an external user; (12:3-27)

p. decoding information inputting means for inputting the encryption, key data and the specific information; (12:7-10)

q. compressed data decoding means for: (i) extracting the encrypted data corresponding to the specific information, input through the decoding information inputting means, from the encrypted data storing means, and (ii) combining and decoding the encrypted data and the input encryption key data back to the compressed data; (12:3-27) and

r. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the image data; (12:22-23)

s. wherein the compression processing is a processing whereby the compressed data cannot be expanded if the portion of the compressed data is changed; (9:52-60; 11:15-50)

- t. wherein the encryption means replaces the portion, extracted as the encryption key data, of the compressed data with data different from the encryption key data; ; (12:40-42)
- u. wherein the encryption means deletes the portion, extracted as the encryption key data, of the compressed data; (the original portion is removed)
- v. wherein the encryption means adds other data to the portion of the compressed data extracted as the encryption key data; (the replaced portion is the original data scrambled with a scrambling key)
- w. wherein a predetermined range from a beginning of the compressed data is made the encryption key data. (9:35-45; 10:56-62)

Claim Rejections - 35 USC § 103

14. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

15. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Candelore.
16. As per claim 20, Candelore discloses an image forming apparatus comprising:
- x. compression means for compressing the image data by a compression processing; (col. 3:49-52)

- y. encryption key extracting means for extracting a portion of the compressed data as encryption key data; encryption means for encrypting the compressed data by changing the portion, extracted as the encryption key data, of the compressed data; (col. 3:49-7:36; 8:17-30)
- z. encryption key storing means for storing the encryption key data extracted by the encryption key extracting means; encrypted data storing means for storing the encrypted data acquired by encrypting the compressed data by the encryption means; (7:29-36)
- aa. management information storing means for storing management information showing correspondence between the encryption key data and the encrypted data both of which have been acquired from the same compressed data; (7:29-36; 9:15-52)
- bb. compressed data decoding means for: (i) extracting the encryption key data and the encrypted data, both of which have been acquired from the same compressed data, from the encryption key storing means and the encrypted data storing means based on the management information stored in the management information storing means, and (ii) combining and decoding the extracted encryption key data and the extracted encrypted data back to the compressed data; (12:3-27)
- cc. expansion means for expanding the compressed data decoded by the compressed data decoding means back to the image data. (12:22-23)

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17. Candelore does not expressly disclose reading means for reading an original document to capture image data corresponding to the original document; and printing means for forming and outputting an image corresponding to the expanded image data on a recording paper. However, it is notoriously well known in the art for image data transmitted by a supplier to be supplied from an original digital document; most transmissions to a set-top box are not televised "live" and are recorded prior to the transmission. Moreover, a user recording means included recording paper is a notoriously well known tactic by a user to preserve content received from a supplier. Digital capture including video tape means or electronic printing paper enable the user to playback or reproduce images and sounds from an initial transmission. Once a transmission is decrypted, capture and restoration of the decrypted image is a trivial matter in the art. Examiner takes Official Notice of these teachings. Therefore, it would be obvious to one of ordinary skill in the art at the time the invention was made for the supplier to include reading means for reading an original document to capture image data corresponding to the original document; and the user to include printing means for forming and outputting an image corresponding to the expanded image data on a recording paper. One would be motivated to do so to reproduce digital content as known to one of ordinary skill in the art. The aforementioned cover the limitations of claim 20.

Conclusion

18. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Communications Inquiry

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JUNG KIM whose telephone number is (571)272-3804. The examiner can normally be reached on FLEX.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barron can be reached on 571-272-3799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Jung Kim/
Primary Examiner AU 2132